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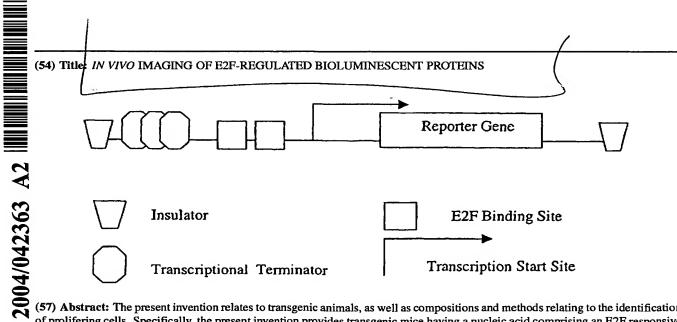
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PCT WO 2004/042363 A2 (51) International Patent Classification7: **G01N** (74) Agent: ELRIFI, Ivor, R.; Mintz, Levin, Cohn, Ferris, Glovsky, and Popeo, P., C., One Financial Center, Boston, MA 02111 (US). (21) International Application Number: PCT/US2003/035282 (81) Designated States (national): AE, AG, AL, AM, AT, AU, (22) International Filing Date: AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, 4 November 2003 (04.11.2003) CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, (25) Filing Language: **English** MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, (26) Publication Language: English TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW. (30) Priority Data: 4 November 2002 (04.11.2002) (84) Designated States (regional): ARIPO patent (GH, GM, 60/423,673 KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), (63) Related by continuation (CON) or continuation-in-part European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, (CIP) to earlier application: ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, US 60/423,673 (CIP) SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, Filed on 4 November 2002 (04.11.2002) GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG). (71) Applicant (for all designated States except US): Published: DANA-FARBER CANCER INSTITUTE, INC. without international search report and to be republished [US/US]; 44 Binney Street, Boston, MA 02115 (US). upon receipt of that report (72) Inventor; and (75) Inventor/Applicant (for US only): KAELIN, William, For two-letter codes and other abbreviations, refer to the "Guid-G., Jr. [US/US]; 177 Commonwealth Avenue, Boston, MA ance Notes on Codes and Abbreviations" appearing at the begin-02116 (US). ning of each regular issue of the PCT Gazette. (54) Title IN VIVO IMAGING OF E2F-REGULATED BIOLUMINESCENT PROTEINS



(57) Abstract: The present invention relates to transgenic animals, as well as compositions and methods relating to the identification of prolifering cells. Specifically, the present invention provides transgenic mice having a nucleic acid comprising an E2F responsive promoter operably linked to a nucleic acid encoding a bioluminescent protein. Such transgenic mice are useful as models for disease and for identifying agents that modulate gene expression and are potential treatments for various disease states and disease conditions such as cancer.